

January 23, 2015

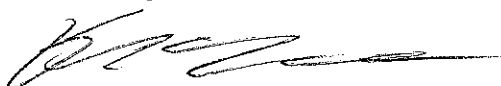
Attn: Compliance Tracker, AE-17J  
Air Enforcement and Compliance Assurance Branch  
U.S. Environmental Protection Agency Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604

RE: Consent Decree Civil Action No. 1:09-CV-545  
Effective Date February 4, 2010

Dear Sirs:

Please find attached the Leak Detection and Repair Compliance Status Report for second Half 2014.  
Please contact me at (513) 467-2184 or [bradley.fattlar@ineos.com](mailto:bradley.fattlar@ineos.com) if you have any questions concerning the submitted information.

Respectfully Submitted,



Bradley Fattlar  
Air Quality Engineer  
INEOS ABS (USA) Corporation

cc: M. Palermo, USEPA Region 5  
B. Weinburg, OEPA  
G. Bachmann, Ohio AG  
B. Pray (M. Kramer), SWOAQA

**INEOS ABS (USA) CORPORATION'S ADDYSTON, OH PLANT**  
**CONSENT DECREE COMPLIANCE STATUS REPORT**

Consent Decree Civil Action No. 1:09-CV-545

Effective Date February 4, 2010

Reporting Period: 7/01/14 – 12/31/14

**I. INTRODUCTION**

The following report contains the required information about INEOS ABS' compliance activities associated with the requirements in Paragraph 35.a. through 35.h. in Appendix A of the Consent Decree.

**II. COMPLIANCE REQUIREMENTS**

Per Appendix A (Enhanced Leak Detection and Repair Program) of the Consent Decree, INEOS ABS met the following compliance requirements:

**A. PERSONNEL REQUIREMENTS**

1. Plant Personnel – The facility employs one full-time Leak Detection and Repair (LDAR) Monitoring Technician to perform monitoring at the facility. In addition, we have an additional four technicians that are trained and perform monitoring in addition to the (LDAR) Monitoring Technician. The LDAR Administrator is not a full time position, but the engineer assigned to this position spends approximately one-third of their time on administrating the program. In March 2013 a technician assumed the LDAR Administrator responsibilities. The LDAR monitoring technician and the new LDAR Administrator are currently Co-leading the program. LDAR repairs are assigned to the Maintenance work request database and prioritized ahead. Recent past performance has shown that the number of employees assigned to the LDAR program is sufficient. Administrative controls have been implemented so that sufficient resources will be utilized if needed to ensure compliance with this program.
2. Contractors – Contractors were not used in the first half of 2014 and are not planned to be used going forward. Contractors can be used, however, for peak work hours.

**B. NON-COMPLIANCE WITH APPENDIX A**

Per Paragraph 50 b. of the Consent Decree, INEOS ABS submitted the following letters of noncompliance to the U.S. EPA and Ohio EPA:

Letter Dated 8/21/14 - This letter report is to inform you that a combination of 58 valves and open ended lines (OEL's) were not monitored under their quarterly frequency since the project went into service on March 12, 2014. The components were added due to a new acrylonitrile rail car unloading project. These components belong to process unit P001. The components were not monitored for first or second quarter 2014. The components were put into the LDAR program on August 18 and 19, 2014. All of the components were monitored on August 19, 2014. No leaks were identified during the monitoring. One valve and one OEL were classified as DTM and will be monitored prior to the end of the 2014 calendar year. One pump was also added to the program on August 19, 2014, but since it is a magnetic drive pump it is seal less and does not require monitoring, but has been included into the program anyway. A MOC was issued for this project; the environmental department was also aware of this change and its

The action was to include the points in the new acrylonitrile unloading station. This has been completed.

## 2. Second Quarter 2014

The one corrective action addresses a pump which was not repaired initially in 5 days, the Environmental Department was unaware of the leak. However the pump was turned off in order to stop the visual leak. The LDAR coordinator sent a refresher Email once alerted of this leaking pump. This communication is another refresher sent to the process coordinators, the maintenance coordinators and to the environmental department.

## H. LDAR EXTERNAL AUDIT

The LDAR External Audit was completed on September 3, 2014. Below were the deficiencies identified and the corrective action plan which was generated. The monitored areas were P021, P042 and P047.

### **Comparative Monitoring**

Per Paragraph 32.a. of Appendix A of the Consent Decree, if the comparative monitoring leak ratio is greater than 3.0, corrective actions shall be identified to correct the deficiencies or systemic causes.

Below are the deficiencies identified.

- Deficiency: Comparative monitoring ratios of 3 or more were recorded for connectors at DIN1 and OEL Closure Devices aggregated across the three units monitored. Exceeding a ratio of 3 is considered non-compliant and corrective actions will be required.
- Remedy: Conduct Method 21 refresher training with the monitors at the site.
  - Timing: October 31, 2014
  - Status: Complete

### **Field Issues**

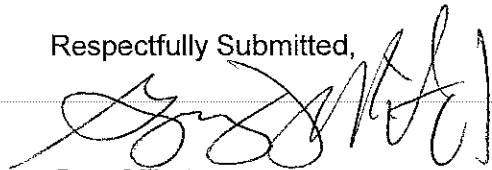
Below are the deficiencies identified in the QA/QC audit with the schedule for completion and status.

- Deficiency: One OEL was found without control by cap, plug, blind, or double block valves. This represents about 0.2% of the estimated potential OELs inspected.
- Remedy: The site auditor's opinion was that one missing cap, plug or blind flange was not an indication of habit and thus did not recommend a long term corrective action. The OEL was recapped on site.
  - Timing: September 2014
  - Status: Completed
- Deficiency: The database review found 64 difficult to monitor (DTM) valves that were not monitored in 2013 as required by the annual monitoring plan.
- Remedy: INEOS is working with LeakDAS on this issue. INEOS will manually ensure all of the valves are monitored in 2014. INEOS intends on downloading the newest update when it is made available.
  - Timing: End of 2014
  - Status: All DTM valves are on the schedule for 2014.

## II. CERTIFICATION

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Act, and 18 U.S.C. §§ 1001 and 1341.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Greg Mikut', is written over a horizontal dotted line.

Greg Mikut  
Site Manager, NAFTA  
INEOS ABS (USA) Corporation

INEOS ABS - Addyston Plant  
LDAR Leakers - 2014

Tag #	Process Unit	Component Description	Leak Detected	First Attempt Required By	First Attempt Completed	Maintenance Performed	Re-scanned Completed	Final Repair Required By	Final Repair Completed	Maintenance Performed	Comments/Reason for Delay of Repair
02516	DIN1	R2 FEED TREE - AN FLOW CONTROL VLV	08/04/14	08/08/14	08/04/14	Tightened Packing	08/04/14	08/19/14	08/04/14	NA	
08491	DIN1	SLURRY TANK PUMP AUTO INLET VLV AT TK BOTTOM	08/07/14	08/12/14	08/12/14	Tightened Packing	08/12/14	08/22/14	08/12/14	Valve Replaced - 11/12/14	
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB-MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	08/13/14	08/18/14	08/13/14	Replaced Valve	08/14/14	08/28/14	08/13/14	NA	
01803*	DIN2	MAN DRAIN VLV ON LINE FROM REFLUX PUMPS TO R1 FD TK	08/14/14	08/19/14	08/15/14	Tightened Packing	08/18/14	08/29/14	08/15/14	NA	
08452	DIN2	MEK IN CAT DIKE MAN BLK VLV	09/03/14	09/08/14	09/04/14	Tightened Bonnet	09/04/14	09/18/14	09/04/14	Valve Replaced - 9/4/14	
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	09/18/14	09/23/14	09/19/14	Replaced Valve	09/19/14	10/03/14	09/19/14	NA	
03831*	DN1	RECYCLE TO TOP OF DV 1 - MANUAL VALVE	09/19/14	09/24/14	09/19/14	Tightened Packing	09/19/14	10/04/14	09/09/14	NA	
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/03/14	12/08/14	12/04/14	Tightened Packing	12/04/14	12/18/14	12/04/14	To be replaced at next shutdown	
04344*	DN3	MEK FILTER MAN OUTLET VLV	12/08/14	12/13/14	12/11/14	Tightened Packing	12/30/14	12/23/14	12/11/14	DOR	Unit Down
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/08/14	12/13/14	12/11/14	Replaced Valve	12/30/14	12/23/14	12/11/14	DOR	Unit Down
11159*	DN3	MEK FILTERS MAN VLV FOR PRESS GAUGE	12/08/14	12/13/14	12/11/14	Tightened Packing	12/30/14	12/23/14	12/11/14	DOR	Unit Down
02494*	DIN1	R2 FEED TREE - RECYCLE LINE - FLOW MTR MAN INLET VLV	12/09/14	12/14/14	12/12/14	Tightened Packing	12/12/14	12/24/14	12/12/14	NA	
10216*	DIN1	R2 FEED TREE (TOP OF STEPS GOLD TAGS)-MEK TO R2 FEED TREE	12/10/14	12/15/14	12/12/14	Tightened Packing	12/12/14	12/25/14	12/12/14	NA	
08971*	9EMUL	AN RAILCAR UNLOADING	12/12/14	12/17/14	12/16/14	Tightened Packing	12/16/14	12/27/14	12/16/14	NA	
04215*	DN1	AUTO BLOCK VLV FOR STY TO TINT MIX TANK	12/15/14	12/20/14	12/16/14	Tightened Packing	12/16/14	12/30/14	12/16/14	NA	
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/14	12/25/14	12/23/14	Tightened Packing	12/23/14	01/04/15	12/23/14	Replaced - 1/12/15	
01408*	DIN1	AN TOTALZER BYPASS VLV	12/29/14	01/03/15	12/30/14	Replaced Valve	12/30/14	01/13/15	12/30/14	NA	

\* - Previously Equipped with Certified Low Leaking Valves

# INEOS ABS - Addyston Plant

## LDAR ERIP Outstanding Improvement

Tag #	Process Unit	Component Description	Leak Detected	Replace/ Repack By Date
07099	DIN1	Refrigeration recycle tank	10/29/13	Next Maintenance Turn Around of the tank.
01400	DIN1	AN TOTALZER VLV BYPASS	10/06/14	Next maintenance turn around.
02298	DIN1	R1 FEED TREE - AN FLOW METER MANUAL OUTLET VALVE	12/18/14	Next maintenance turn around.
08444	DIN2	BACK PRESSURE CONTROL VALVE FOR R1 FEED TANK PUMPS .	11/17/14	Next maintenance turn around.
02298	DIN2	N2 INTO TOP OF REFLUX RECEIVER BOMB	10/10/14	Next maintenance turn around.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	09/02/14	Next time A13 is empty
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/3/2014	Next maintenance turn around.
07721	DN1	REFLUX RECIEVER AUTO DRAIN VALVE	12/03/14	Next maintenance turn around.
03733	DN3	DV PLATFORM AREA - FLOW CONTROL VALVE OUTLET - MANUAL BLOCK VALVE	12/08/14	Next maintenance turn around.
03980	DN3	RECYCLE FILTERS MANUAL OUTLET DRAIN VALVE	12/07/14	Next maintenance turn around.
04339	DN3	MEK FILTER MANUAL INLET VALVE	12/08/14	Next maintenance turn around.
6125	DN3	MEK TO DN3 FLOW CONTROL VALVE	12/08/14	Next maintenance turn around.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	10/02/14	Next maintenance turn around.
08949	9Emul	AN RAILCAR UNLOADING	12/12/14	Next maintenance turn around.
00805	9Emul	AN RAILCAR UNLOADING	12/12/14	Next maintenance turn around.

# INEOS ABS - Addyston Plant

## LDAR ERIIP Outstanding Improvement

1/28/2014

Tag #	Process Unit	Component Description	Leak Detected	Date Replaced or Repacked
08285	DN3	TOP OF MEK TANK-MAN BLK VLV IN METERING PUMPS RECIRC LINE	04/23/14	07/09/14
08290	DN3	TOP OF MEK TANK-TRUCK FILL LINE MAN VLV	04/23/14	07/09/14
07933^	DN3	E & W PUMPS-MAN OUTLET VLV TO FLOW METERS	08/05/14	11/12/14
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/8/2014	12/11/2014
11087	DIN2	LINE TO BARO SUMP MAN DRAIN VLV- LEVEL BELOW JETS	03/12/14	07/09/14
02068	DIN2	Recycle FCV	10/27/13	07/02/14
01963	DIN2	Irganox in R2 feed tree	10/23/13	07/08/14
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB-MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	8/13/2014	8/14/2014
08452	DIN2	MEK IN CAT DIKE BLOCK VALVE	9/3/2014	9/3/2014
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	9/18/2014	9/19/2014
01406	DIN1	AN TOTALZER BYPASS VLV	12/29/2014	12/30/2014
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/2014	1/12/2015

^ - Valve has no packing. Plug was leaking. Plug has been replaced.

INEOS ABS - Addyston Plant  
LDAR Leaker Replacements/Repackings -  
Greater than 250 ppm Leak

Tag #	Process Unit	Component Description	Leak Detected	Date Replaced	Date Repacked	Shutdown Req'd?	Replace/ Repack By Date	Comments
08491	DIN1	Slurry Tank Pump Auto Inlet Valve AT TK	8/7/2014	11/12/2014		YES		Shutdown not technically needed but makes far the most sense in terms of logic, Env and safety
09084	DIN2	BOTTOM OF REFLUX RECEIVER BOMB-MAN DRAIN VLV ON OUTLET GOING TO ORGANIC TRAP	8/13/2014	8/14/2014		NO		Visual Leaker
08452	DIN2	MEK IN CAT DIKE BLOCK VALVE	9/3/2014	9/4/2014		NO		
08449	DIN2	MAN DRAIN VLV ON MEK LINE IN CAT DIKE AREA-1ST LVL	9/18/2014	9/19/2014		NO		
08203	DN1	REFLUX SUB COOLER DRAIN VALVE - UNDER DN1 REACTOR	12/3/2014			YES		
03755	DN3	RECYCLE TO DN3 DOME-Y STRAINER BEFORE FM MAN DRAIN VLV	12/8/2014	12/11/2014		NO		
08235	9EMUL	CN/EMUL PUMP OUTLET GAUGE	12/20/2014	1/12/2015		NO		
01406	DIN1	AN TOTALZER BYPASS VLV	12/29/2014	12/30/2014		NO		



**INEOS ABS - Addyston Plant**  
**LDAR Leaker Replacements/Repackings -**  
**Between 100 ppm and 250 ppm Leak**  
**October 1, 2014 - December 31, 2014**

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07721	DN1	REFLUX RECIEVER AUTO DRAIN VALVE	12/03/14	141		
03733	DN3	DV PLATFORM AREA - FLOW CONTROL VALVE OUTLET - MANUAL BLOCK VALVE	12/08/14	147		
03980	DN3	RECYCLE FILTERS MANUAL OUTLET DRAIN VALVE	12/07/14	136		
04339	DN3	MEK FILTER MANUAL INLET VALVE	12/08/14	247		
6125	DN3	MEK TO DN3 FLOW CONTROL VALVE	12/08/14	104		
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	10/02/14	106		
08949	9Emul	AN RAILCAR UNLOADING	12/12/14	123		
00805	9Emul	AN RAILCAR UNLOADING	12/12/14	102		
01400	DIN1	AN TOTALZER VLV BYPASS	10/06/14	123	Have already been replaced with Low Leaking Technology	
02298	DIN1	R1 FEED TREE - AN FLOW METER MANUAL OUTLET VALVE	12/18/14	145		
08444	DIN2	BACK PRESSURE CONTROL VALVE FOR R1 FEED TANK PUMPS	11/17/14	166		
02298	DIN2	N2 INTO TOP OF REFLUX RECEIVER BOMB	10/10/14	102		

**July 1, 2014 - September 30, 2014**

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07933	DN3	E & W PUMPS-MAN OUTLET VLV TO FLOW METERS	08/05/14	187	11/12/14	Valve has no packing. Plug was leaking. Plug has been replaced.
00805	9Emul	9EM/CN A13 DAY TANK OUTLET VALVE	09/02/14	192		The tank will need to be emptied and degassed.
01400*	DIN1	AN TOTALZER VLV BYPASS	08/27/14	140		
01401*	DIN1	AN TOTALZER INLET VLV FOR DIN1	09/02/14	151		

\* - Previously Equipped with Certified Low Leaking Technology

[illegible]

**INEOS ABS - Addyston Plant**  
**LDAR Leaker Replacements/Repackings -**  
**Between 100 ppm and 250 ppm Leak**  
**April 1, 2014 - June 30, 2014**

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
08290	DN3	TOP OF MEK TANK-TRUCK FILL LINE MAN VLV	04/23/14	155	07/09/14	
08285	DN3	TOP OF MEK TANK-MAN BLK VLV IN METERING PUMPS RECIRC LINE	04/23/14	110	07/09/14	

**INEOS ABS - Addyston Plant**  
**LDAR Leaker Replacements/Repackings -**  
**Between 100 ppm and 250 ppm Leak**  
**Jan 1, 2014 - March 31, 2014**

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
11087	DIN2	LINE TO BARO SUMP MAN DRAIN VLV- LEVEL BELOW JETS	03/12/14	156	07/09/14	
02096*	DIN2	AN TO PROCESS- 2ND FLR-WEST OF CONTACTOR	03/09/14	152		

\* - Previously Equiped with Certified Low Leaking Technology

**INEOS ABS - Addyston Plant**  
**LDAR Leaker Replacements/Repackings -**  
**Between 100 ppm and 250 ppm Leak**  
**October 1, 2013 - December 31, 2013**

Tag #	Process Unit	Component Description	Leak Detected	Conc. (ppm)	Date Replaced	Date Repacked
07099	DIN1	Refrigeration recycle tank	10/29/13	142		
01400*	DIN1	AN filter system	10/04/13	130		
02068	DIN2	Recycle FCV	10/27/13	211	07/02/14	
01963	DIN2	Irganox in R2 feed tree	10/23/13	120	07/08/14	
00524	DN1	DN3 pruge into spent monomer tank	11/22/13	184	11/22/13	
03816	DN1	Recycle to top of DV1 FM man outlet valve	11/27/13	104	03/28/14	

\* - Previously Equiped with Certified Low Leaking Technology

**INEOS ABS - Addyston Plant**  
**LDAR Leaker Improvement/Replacement -**  
**Connectors > 250 ppm**

Other connectors have been improved as a first or final attempt on repair to correct a leak.

Tag #	Process Unit	Component Description	First Leak Detected	Second Leak Detected	Date Improved	Comments
02458B	DIN1	Connector-North stripper pump manual inlet block valve	12/27/12	08/17/13		Currently being replaced.